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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,272	10/10/2003	Daniel Nicholas Crow	5437-65503	1729

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EXAMINER	
KARMELEK, ALISON L	

ART UNIT	PAPER NUMBER
3623	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/684,272	CROW ET AL.	
	Examiner	Art Unit	
	ALISON KARMELEK	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18,67,68 and 73-91* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18,67,68 and 73-91* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Requirement for Information*.

DETAILED ACTION

1. The following is a Final office action in response to communications received March 31, 2008. Claims 18, 67-68, 74, 77, 80, 83, 86 have been amended. Claims 90-91 have been added. Claims 18, 67-68, and 73-91 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 18, 67-68, and 73-91 have been considered but are moot in view of the new grounds of rejection. Examiner respectfully request that Applicant contact the Examiner if Applicant feels this will expedite prosecution.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 18, 67-68, and 73-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sobotka et al. (U.S. 5,197,004) in view of Pathria et al. (U.S. 6,728,795) and in further view of Tunkelang (U.S. 2003/0120630) and Ziff Davis ("Beat the Competition Every Time", Ziff Davis Smart Business for the New Economy, March 2002).

5. As per claim 18, Sobotka et al. teaches a method for finding a plurality of job candidates suitable for a job requisition, the method comprising:

via at least one ontology-based extractor and at least one ontology-independent extractor, conceptualizing job candidate data for a plurality of job candidates to generate conceptualized job candidate data, wherein the conceptualized job candidate data comprises, for each job candidate, a set of concept scores defining a respective point in an n-dimensional concept space, the concept scores including concept scores for at least one job title, and at least one job skill for the job candidate, whereby the job candidates are represented by job candidate points in the n-dimensional concept space (See figures 5-7, column 3, lines 38-60, column 4, lines 29-50 and 56-67, column 5, lines 10-35 and 49-67, column 6, lines 29-45, wherein the job candidate data is conceptualized through an ontology-independent extractor (i.e. the apparatus that accepts and converts the resume into a series of ordered blocked of computer understandable character strings) and an ontology extractor (an extractor that uses a hierarchical knowledge base and word pattern recognition to extract relevant words and word groups). Using this parsed and extracted data, including the resume information of skills and job titles, the candidates are given scores. The concept score defines a point in n-dimensional concept space as the candidate data is conceptualized on multiple attributes to create a score).

Generating desired job candidate criteria by extracting concepts from job candidate data and receiving desired job candidate criteria, wherein the desired job candidate criteria comprises a desired job candidate criteria point in the n-dimensional

concept space (See abstract, column 4, lines 55-67, column 5, lines 1-20 and 59-66, column 6, lines 35-45, wherein the system has stored therein desired job candidate criteria (defined for job categories of the system) which comprise attributes of the category. Thus the requirements of the job category are converted into desired criteria points. See column 1, lines 25-30, which discloses that job categorization is for the result of hiring new employee (new employee requisition));

finding the job categories that are most applicable to the applicant whose resume is being analyzed and outputting in electronic format (See abstract, column 4, lines 50-67, column 5, lines 1-20 and 59-66, column 6, lines 35-55).

However, while Sobotka et al. discloses finding the job category or categories with desired criteria that most closely match the scores and attributes of the job candidate data, Sobotka et al. does not expressly disclose generating the desired candidate criteria by extracting concepts from job candidate data for a particular employee having desired characteristics, wherein the job candidate data for the particular employee comprises a resume of the particular employee having desired characteristics. Further, Sobotka et al. does not expressly disclose finding m job candidate points (i.e. multiple job candidates) closest to the desired job candidate criteria point in the n-dimensional concept space and in a graphical user interface, indicating job candidates associated with the m job candidate points as job candidates matching the desired job candidate criteria, wherein job candidates resembling the particular employee are indicated.

Pathria et al. discloses generating the desired candidate criteria by extracting concepts from job candidate data for a particular employee having desired characteristics, wherein the job candidate data for the particular employee comprises a resume of the particular employee having desired characteristics, comparing job candidates to desired job candidate criteria, and indicating job candidates that resemble the particular employee (See column 4, lines 35-42, column 5, lines 40-62, column 6, lines 5-20 and 30-41, column 9, lines 55-61, and column 14, lines 1-8, wherein desired candidate data is generated using the resume of a current employee whose performance and job history is know. The data is generated by unraveling the document/resume and then is compared to new applicants to determine if the applicants are good fits). However, Pathria et al. does not expressly disclose the desired job candidate criteria being for a single particular employee who previously performed well in the position, or rather the particular employee being a single particular employee who previously performed well in the position.

Ziff Davis teaches desired job candidate criteria being for a single particular employee who previously performed well in the position, or rather the particular employee being a single particular employee who previously performed well in the position (p. 3 teaches in the background Unicru compares applicants' answers to an ideal candidate profile...where the back-end reporting system hosts application records and keeps tabs on the most successful hire, so G.I. Joe's can look for *more candidates just like them*. Since the application records, or resumes, are used to look for candidates just like them, Examiner is considering the Unicru system to utilize a single

candidate who has performed well as the ideal candidate profile, or the single particular employee profile).

Both Pathria and Ziff Davis teach generating desired job candidate criteria via extraction of concepts, where Pathria teaches the extraction is for ideal qualities that make up an ideal candidate and Ziff Davis teaches the criteria extracted from a single particular employee who has previously performed well in the position. Since ach individual element and its function are shown in the prior art, albeit shown in separate reference, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself - that is in the substitution of the desired candidate criteria of Pathria for the desired candidate job criteria of a single particular employee who has previosuly performed well in the position of Ziff Davis. Thus, the simple substitution of one known type of data for another producing a predictable result renders the claim obvious.

Additionally, Pathria does not expressly disclose finding m job candidate points (i.e. multiple job candidates) closest to the desired job candidate criteria point in the n-dimensional concept space and in a graphical user interface, indicating job candidates associated with the m job candidate points as job candidates matching the desired job candidate criteria.

Tunkelang discloses finding m item points closest to the desired item criteria point in the n-dimensional concept space (where the items have multiple associated attributes/properties) and indicating items associated with the m items points as items matching the desired item criteria (See paragraphs 0017, 0019, 0052-4, 0165, 0203-4,

0262, 0272, wherein items have associated properties and items that are closest to the item are determined based on the distance between the two sets of properties. The system returns ordered items in terms of their distance to the reference item).

However, while Tunkelang discloses user interfaces (See paragraph 0272), Tunkelang does not expressly disclose a graphical user interface.

Both Sobotka et al. and Pathria et al. disclose choosing job candidates based on resume data where the candidates' resume is compared to desired criteria. Pathria et al. specifically disclose utilizing the resume and job history of a previously hired employee to select new candidates using a model. It would have been obvious to one of ordinary skill in the art at the time of the invention to extract the desired candidate criteria from a resume of a previous employee in order to more efficiently produce high quality matches using knowledge of previous performance. See Pathria et al., column 4, lines 15-21, column 5, lines 55-62, and column 6, lines 5-20 and 30-41.

Further, both Tunkelang and Sobotka et al. disclose matching items with attributes (properties) to other items with attributes. Sobotka et al. specifically discloses being able to output the applicable matches in electronic format. Tunkelang discloses user interfaces. Graphical user interfaces are well known types of user interfaces used to output data efficiently in an electronic format. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a graphical user interface to electronically output the results of Sobotka et al. in order to more efficiently and accurately classify a job applicant by displaying such information to a recruiter using the system. See column 3, lines 35-50.

Finally, Sobotka et al. discloses conceptualizing job candidate data through an ontology-independent extractor (i.e. the apparatus that accepts and converts the resume into a series of ordered blocked of computer understandable character strings) and an ontology extractor (an extractor that uses a hierarchical knowledge base and word pattern recognition to extract relevant words and word groups). Using this converted and extracted data, the data including the resume attributes, the candidates are given scores based on the matches of the job category data and the job candidate's data. Tunkelang discloses distance functions being used to calculate the order of matching of items with a target item based on the number of attributes/properties in common. Tunkelang specifically discloses in paragraph 0272 that the distance function is applicable in any system that determines the distance (i.e. the number of similarities or intersections) between items. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the finding multiple job candidates closest to the desired job candidate criteria in order to more efficiently and accurately compute the subset of employees that most closely match the desired criteria/properties. See Tunkelang, paragraphs 0017-9 and 0199, and Sobotka et al., abstract and column 3, lines 37-50, which disclose accuracy and efficiency of computation.

6. As per claim 67, claim 67 recites substantially similar limitations to claim 18 and is therefore rejected using the same art and rationale set forth above.

7. As per claim 68, Sobotka et al. teaches wherein the plurality of job candidates for the position are represented by a plurality of job candidate representations in the n-

dimensional concept space (See figures 5-7, column 3, lines 38-60, column 4, lines 29-50 and 56-67, column 5, lines 10-35 and 49-67, column 6, lines 29-45, wherein an extractor uses a hierarchical knowledge base and word pattern recognition to extract relevant words and word groups, and uses this data that includes resume information like skills and job titles to give scores and place the information in n-dimensional concept space, as the candidate data is conceptualized on multiple attributes to create a score);

the desired job candidate characteristics are represented by a point in the n-dimensional concept space (See abstract, column 4, lines 55-67, column 5, lines 1-20 and 59-66, column, lines 35-45, wherein the system has stored therein desired job candidate criteria (defined for job categories of the system) which comprise attributes of the category). However, neither Sobotka et al. nor Pathria et al. expressly disclose that the matching is performed via a distance function to find the m job candidate representations closest to the point in the n-dimensional concept space.

Tunkelang discloses matching using a distance function to find m item representation points closest to the desired item point in the n-dimensional concept space (where the items have multiple associated attributes/properties) (See paragraphs 0017, 0019, 0052-4, 0165, 0203-4, 0262, 0272, wherein items have associated properties and items that are closest to the item are determined based on the distance between the two sets of properties. The system returns ordered items in terms of their distance to the reference item).

Sobotka et al. and Pathria et al. are combinable for the reasons set forth above. Further, both Tunkelang and Sobotka et al. disclose matching items with attributes (properties) to other items with attributes. Sobotka et al. discloses conceptualizing job candidate data and using this conceptualized data (which including the resume attributes) to give candidates scores based on the matches of the job category data and the job candidate's data. Tunkelang discloses distance functions being used to calculate the order of matching of items with a target item based on the number of attributes/properties in common. Tunkelang specifically discloses in paragraph 0272 that the distance function is applicable in any system that determines the distance (i.e. the number of similarities or intersections) between items. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the finding multiple job candidates closest to the desired job candidate criteria in order to more efficiently and accurately compute the subset of employees that most closely match the desired criteria/properties. See Tunkelang, paragraphs 0017-9 and 0199, and Sobotka et al., abstract and column 3, lines 37-50, which disclose accuracy and efficiency of computation.

8. As per claim 73, Sobotka et al. discloses wherein the job candidate data for the job candidate comprises resume data including degrees attained, experience (See column 2, lines 55-65, column 4, lines 40-50, column 5, lines 20-40, and column 6, lines 40-60, which discloses the degrees and education of the job candidate, as well as skill and aptitude information). However, Sobotka et al. does not expressly disclose, nor does Tunkeland, assessment results of the job candidate.

Sobotka et al. discloses job candidate data including resume data, the resume data including degrees, skills, and aptitude data. It is old and well known in the art to include on a resume achievements and awards, those including certifications held by the applicant and ratings attained at previous jobs. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include assessments in the resume data of Sobotka et al. in order to more accurately classify an applicant according to his/her potential based on data contained in his/her resume, such as aptitude, certifications, and ratings. See column 3, lines 38-60, and column 5, lines 10-40.

9. As per claim 74, Sobotka et al. discloses using at least one ontology-based extractor to conceptualize job candidate data for a plurality of job candidates (See figures 5-7, column 3, lines 38-60, column 4, lines 29-50 and 56-67, column 5, lines 10-35 and 49-67, column 6, lines 29-45, wherein the job candidate data is conceptualized through an ontology extractor (an extractor that uses a hierarchical knowledge base and word pattern recognition to extract relevant words and word groups)). Sobotka et al. further discloses a hierarchical data structure for a knowledge base that represents word patterns, with job categories, indicators, and buzzwords (See figure 2, column 3, lines 40-60, and column 4, line 55-column 5, line 35).

However, Sobotka et al. does not expressly disclose that extraction of concepts is performed based on detection of a synonym for a concept in the job candidate data for the particular employee having the desired characteristics.

Pathria et al. discloses the job candidate data for the particular employee having the desired characteristics (See column 4, lines 35-42, column 5, lines 40-62, column 6, lines 5-20 and 30-41, column 9, lines 55-61, and column 14, lines 1-8, wherein desired candidate data is generated using the resume of a current employee whose performance and job history is know. The data is generated by unraveling the document/resume and then is compared to new applicants to determine if the applicants are good fits). However, Pathria et al. does not expressly disclose extraction of concepts is performed based on detection of a synonym for a concept. Tunkelang further does not expressly disclose detecting a synonym of the concept in the job candidate data.

Both Sobotka et al. and Pathria et al. disclose choosing job candidates based on resume data where the candidates' resume is compared to desired criteria. Pathria et al. specifically disclose utilizing the resume and job history of a previously hired employee to select new candidates using a model. It would have been obvious to one of ordinary skill in the art at the time of the invention to extract the desired candidate criteria from a resume of a previous employee in order to more efficiently produce high quality matches using knowledge of previous performance. See Pathria et al., column 4, lines 15-21, column 5, lines 55-62, and column 6, lines 5-20 and 30-41.

Sobotka et al. discloses conceptualizing job candidate data through an ontology based extractor that uses a hierarchical knowledge base and word pattern recognition to extract relevant words and word groups. Examiner takes official notice that the use of synonyms in the knowledge base of ontology, in order to more efficiently capture

concepts, is old and well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include synonyms in the ontology based extractor of Sobotka et al. in order to more efficiently and accurately classify a candidate employee based on the data contained in his/her resume. See figure 2, column 3, lines 40-60, and column 4, line 55-column 5, line 35, of Sobotka et al.

10. As per claim 75, Sobotka et al. discloses wherein the concept scores are based at least in part on a level of experience for at least one of the concepts (See column 2, lines 55-65, column 4, lines 35-55, column 5, lines 20-37 and line 60-column 6, lines 1-10 and lines 47-62, wherein level of experience is considered in calculating a score).

11. As per claim 76, Sobotka et al. discloses concept scores that are based buzzwords and on strengths of the indicators contained in the candidate's data (See column 5, lines 50-67, and column 6, which disclose assessing scores based on strengths and thresholds). However, Sobotka et al. does not expressly disclose that indicator strength is specifically increased based at least in part on reputation of an organization at which an associated concept was applied according to the job candidate data. Neither Pathria et al. nor Tunkelang disclose increasing the score based on the reputation of an organization at which an associated concept was applied according to the job candidate data.

Pathria et al., Sobotka et al., and Tunkeland are combinable for the reasons set forth above. Further, Sobotka et al. discloses conceptualizing job candidate data, the data related to resume information (such as job titles, degrees, etc.). Sobotka et al.

further discloses assigning scores based on buzzwords and strength of indicators, as well as understanding of aptitude based on these buzzwords and indicators. Examiner takes official notice that it is old and well known to value experience and degrees differently based on the enterprise or university at which it is gained (for example some schools engineering departments are rated higher than other schools) in order to better select and assess job candidates. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include consideration of a reputation of an organization in the strengths of indicators of Sobotka et al. in order to more efficiently and accurately classify a candidate employee based on the data contained in his/her resume. See figure 2, column 3, lines 40-60, and column 4, line 55-column 5, line 35, of Sobotka et al.

12. Claim 77 recites equivalent limitations to claim 18 and is therefore rejected using the same art and rationale set forth above.

13. Claims 78-82 recite equivalent limitations to claims 72-76, respectively, and are therefore rejected using the same art and rationale set forth above.

14. Claim 83 recites equivalent limitations to claim 18, and is therefore rejected using the same art and rationale set forth above. Sobotka et al. further discloses a system comprising memory for storing computer executable instructions and at least one processor operable in conjunction with the instructions stored in the memory for finding the plurality of job candidates suitable for the job requisition.

15. Claims 84-88 recite equivalent limitations to claims 72-76, respectively, and are therefore rejected using the same art and rationale set forth above.

16. As per claim 89, Sobotka et al. teaches wherein the job candidate data comprises a resume of the job candidate (See column 3, lines 38-60, column 4, lines 20-40, column 5, lines 10-35, which discloses resume data concerning a job candidate).

17. Claims 90-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pathria et al. (U.S. 6,728,795) in view of Ziff Davis ("Beat the Competition Every Time", Ziff Davis Smart Business for the New Economy, March 2002) and in further view of Tunkelang (U.S. 2003/0120630).

18. As per claim 90, Pathria et al. teaches a computer-implemented method of finding a job candidate suitable to fill a position via finding a job candidate for the position who resemble a particular employee having desired characteristics, the method comprising: generating desired job candidate characteristics via extraction having concepts from job candidate data for the particular employee having characteristics, wherein the job candidate data comprises a resume of the particular employee having desired characteristics, wherein generating desired candidate characteristics comprises submitting job candidate data to plurality of cloners configured to select concepts, wherein the cloners configured to select concepts, wherein the cloners comprises a role cloner, a skill cloner, a company cloner, an industry cloner and an education cloner (See column 4, lines 35-42, column 5, lines 40-62, column 6, lines 5-20 and 30-41, column 9, lines 55-61, and column 14, lines 1-8, wherein desired candidate data is generated using the resume of a current employee whose performance and job history

is know. The data is generated by unraveling the document/resume and then is compared to new applicants to determine if the applicants are good fits; col. 7, lines 45-64 teaches the dataset to be matched, or cloned, as containing job types, or role, skills, employers, department, experience, or company and industry, and education);

matching the desired job candidate characteristics to a set of a plurality of job candidates for the position, wherein the generating and the matching are performed by a computer system (col. 15, line 15-col. 16, line 6 teaches matching the documents, or the job candidate characteristics to a set of plurality of job candidates);

providing results indicating a plurality of job candidates for the position matching the desired job candidate characteristics extracted from the job candidate data for the particular employee having desired characteristics (col. 15, lines 31-67 teaches providing the candidates who match the desired job candidate characteristics extracted).

However, Pathria et al. does not expressly teach the job candidate data being for a single particular employee who previously performed well in the position. Ziff Davis teaches desired job candidate criteria being for a single particular employee who previously performed well in the position, or rather the particular employee being a single particular employee who previously performed well in the position (p. 3 teaches in the background Unicru compares applicants' answers to an ideal candidate profile...where the back-end reporting system hosts application records and keeps tabs on the most successful hire, so G.I. Joe's can look for *more candidates just like them.* Since the application records, or resumes, are used to look for candidates just like

them, Examiner is considering the Unicru system to utilize a single candidate who has performed well as the ideal candidate profile, or the single particular employee profile).

Both Pathria and Ziff Davis teach generating desired job candidate criteria via extraction of concepts, where Pathria teaches the extraction is for ideal qualities that make up an ideal candidate and Ziff Davis teaches the criteria extracted from a single particular employee who has previously performed well in the position. Since ach individual element and its function are shown in the prior art, albeit shown in separate reference, the difference between the claimed subject matter and the prior art rests not on any individual element or function but in the very combination itself - that is in the substitution of the desired candidate criteria of Pathria for the desired candidate job criteria of a single particular employee who has previosuly performed well in the position of Ziff Davis. Thus, the simple substitution of one known type of data for another producing a predictable result renders the claim obvious.

Neither Pathria et al. nor Ziff Davis teaches matching via an n-dimenaional concept space. Tunkelang discloses matching using a distance function to find m item representation points closest to the desired item point in the n-dimensional concept space (where the items have multiple associated attributes/properties) (See paragraphs 0017, 0019, 0052-4, 0165, 0203-4, 0262, 0272, wherein items have associated properties and items that are closest to the item are determined based on the distance between the two sets of properties. The system returns ordered items in terms of their distance to the reference item).

Both Tunkelang and Pathria et al. disclose matching items with attributes (properties) to other items with attributes. Pathria et al. discloses conceptualizing job candidate data and using this conceptualized data (which including the resume attributes) to match candidated based on the matches of the job candidate data. Tunkelang discloses distance functions being used to calculate the order of matching of items with a target item based on the number of attributes/properties in common. Tunkelang specifically discloses in paragraph 0272 that the distance function is applicable in any system that determines the distance (i.e. the number of similarities or intersections) between items. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the finding multiple job candidates closest to the desired job candidate criteria in order to more efficiently and accurately compute the subset of employees that most closely match the desired criteria/properties. See Tunkelang, paragraphs 0017-19 and 0199 which disclose accuracy and efficiency of computation.

19. As per claim 91, it recites one or more computer readable media comprising computer-executable instructions causing a computer to perform the methods of claim 90. Since Pathria et al. teaches a computer readable medium (col. 5, lines 40-50), claim 91 is rejected for the same reasons set forth above.

Conclusion

This **Office action** has an attached requirement for information under **37 C.F.R. § 1.105**. A complete response to this Office action **must include** a complete response to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hammit et al. (U.S. 7,200,563) discloses an ontology driven information system which uses models to represent concepts and relationships.

Bonnstetter et al. (U.S. 5,551,880) discloses predicting success of an employee with regards to a specific job.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALISON KARMELEK whose telephone number is (571)272-1808. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALK
6/18/08
/A. K./
Examiner, Art Unit 3623

/Beth Van Doren/
Supervisory Patent Examiner, Art Unit 3623

37 C.F.R. 1.105 – Requirement for Information

Upon examination of application 10/684,272, several websites were encountered through http://web.achrive.org. Some of the content linked from the websites documented in the rejection is currently unavailable. Since the information documented from www.unicu.com seems to pertain to subject matter contained in the present invention, Examiner requests any documentation concerning information that was published over a year before the priority date of the present invention concerning the prior assignee Unicru that may be of relevance in the prosecution of the present application. Particularly, any documentation relating to the product "Smart Assessment" (as documented in the Overholt reference) and a particular white paper entitled, "Hiring Management System". Applicant and the assignee of this application are required under 37 C.F.R. §1.105 to provide the citation and a copy of each publication that any of the applicants relied upon to develop the disclosed subject matter that describes the applicant's invention. For each publication, please provide a concise explanation of the reliance placed on that publication in the development of the disclosed subject matter.

The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFP 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

This requirement is an attachment of the enclose Office action. A complete response to the enclose Office action must include a complete response to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclose Office action, which is 3 months.

AK
6/18/08
/A. K./
Examiner, Art Unit 3623

/Beth Van Doren/
Supervisory Patent Examiner, Art Unit 3623